

ABSTRACT OF THE DISCLOSURE

Provided is an apparatus for decoding input data. Input means inputs coded data, and a buffering means inputs, stores and outputs data. First register means
5 stores a portion of the data output from the buffering means, and first read/write means controls writing of the data into the first register means and reading of the data out of the first register means so as to change the order of the data. Decoding means decodes a combination of at least part of the coded data provided by the input means and the data read out of the first register means. Second register
10 means stores data output by the decoding means, and second read/write means controls writing of the data into the second register means and reading of the data out of the second register means so as to change the order of the data, with the data read out of the second register means being stored in the buffering means. Third read/write means for transfers the data out of a portion of the buffering means into
15 a third register means, coupled to the buffering means, and then transfers the same data from the third register means back into the same portion of said buffering means, but in a different order, and repeats the transferring steps for different portions of the buffering means.